

TCAS II CHANGE PROPOSAL (CP)

DATE: 11 / 30 / 05

No.: 114

TCAS II Version: DO-185A (v7) X Other (Specify) _____

MOPS Function Area: Surveillance X Display Req'ts _____ CRS _____

CAS Pseudocode _____ Test Suites _____ Other _____

Priority: URGENT _____ Necessary X Optional _____

CP Type: ERROR _____ Enhancement X Evaluation Request _____

Editorial (Logic) _____ Editorial (Text) _____

Description of Problem/Issue:

Volume I test 2.2.4.6.2.2.1, states:

“The TCAS II squitter processing function shall have memory capacity for at least 150 Mode S addresses.

Note: Although the maximum required surveillance range of TCAS II is 14 nmi., Mode S squitters will typically be received from targets out to the nominal detection range of 30 nmi. In a density of 0.3 Mode S aircraft per sq. nmi., there will be about 141 aircraft within 30 nmi. of TCAS II.”

With multilateration systems, Mode S mandates, and RVSM, the Mode S airspace is at higher densities than anticipated by the above requirement.

ICAO, Annex 10, Volume IV, section 3.1.3.13 also has a statement calling for a capacity of at least 150 addresses.

Proposed Resolution:

The capacity for unique Mode S addresses needs to be increased. This issue should be worked in conjunction with the folks responsible for ICAO Annex 10, Volume IV.

Requester: Kevin Wilson

Organization: Honeywell

DISPOSITION OF CHANGE PROPOSAL (Per RWG):

DATE OF DISPOSITION 11 / Dec / 2007

Rejected _____ **Deferred** ~~x~~ _____ [Review Date: ____ / ____ / ____]

Accepted _____ **Modified** _____ **Withdrawn** _____

DISPOSITION OF CHANGE:

On Hold _____ **Designing** _____ **Testing** _____ **Done** _____ [Date: ____ / ____ / ____]

Final Approval of Changes:

Signature: _____

Date: ____ / ____ / ____